

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)  
Approved for use through 10/31/2002. OMB 0851-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			Complete if Known	
			Application Number	10/039,147
			Filing Date	01/04/2002
			First Named Inventor	David W. Bro
			Group Art Unit	2152
			Examiner Name	
			Attorney Docket Number	P214021
Sheet	1	of 10	APR 0 2 2002	

**RECEIVED**  
APR 0 9 2002  
Technology Center 2100

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup>			
<i>PS</i>		5,977,951		Danieli et al.	11-1999	
<i>PS</i>		5,746,602		Kikinis	05-1998	
<i>PS</i>		5,752,880		Gabai et al.	05-19-1998	
<i>PS</i>		5,733,131		Park	03-31-1998	
<i>PS</i>		5,636,994		Tong	06-10-1997	
<i>PS</i>		5,655,945		Jani	08/12/1997	
<i>PS</i>		4,846,693		Baer	07-11-1989	
<i>PS</i>		5,873,765		Rifkin et al.	02-23-1999	
<i>PS</i>		4,809,335		Rumsv	02-28-1989	
<i>PS</i>		5,846,132		Junkin	12-08-1998	
<i>PS</i>		5,890,963		Yen	04-06-1999	
<i>PS</i>		5,707,289		Watanabe et al.	01-13-1998	
<i>PS</i>		5,800,268		Molnick	09-01-1998	
<i>PS</i>		5,907,831		Lotvin et al.	05-25-1999	
<i>PS</i>		5,801,946		Nissen et al.	09/01/1998	
<i>PS</i>		4,840,602		Rose	06-20-1989	
<i>PS</i>		4,857,030		Rose	08/15/1989	
<i>PS</i>		5,607,336		Lebensfeld et al.	03/04/1997	
<i>PS</i>		5,596,994		Bro	01-1997	
<i>PS</i>		5,377,258		Bro	12-1994	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Office <sup>3</sup>	Number	Kind Code <sup>5</sup> (if known)				
PS			EP0508912 A1		European Patent Office	10-14-1992		
PS			0275826 A1		European Patent Office	07-1998		
PS			0442676 A2		European Patent Office	08-1991		
PS			WO 95/07504		WIPO	03-1995		
PS			0 281 427 B1		Pierce et al.	08-05-1992		
PS			0 583 908 A2		Edgar et al.	02-23-1994		
PS			Japanese 59 228473			06-09-1983		
PS			GB 2 224 896 A		Powell	12-11-1991		
PS			WO 92/11731		WIPO/Bell	07-09-1992		
PS			WO 93/08654		WIPO/Stillman et al	04-29-1993		

Examiner Signature <i>Philip J. Scudlark</i>	Date Considered <i>1/31/2005</i>
--	----------------------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

(use as many sheets as necessary)

Sheet | 2

2

of

10

Application Number

10/039,147

Filing Date

01/04/2002

**First Named Inventor**

David W. Brown

### Group Art Unit

2152

**Examiner Name**

Attorney Docket Number

**P214021**

Examiner Initials <sup>1</sup>	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>3</sup>			
W		4,897,835		Gaskill	01-1990	
P		4,713,808		Gaskill	12-1987	
P		6,209,037		Brown et al.	03/27/2001	
P		5,867,385		Brown et al.	02-02-1999	
P		5,691,897		Brown et al.	11-25-1997	
P		6,139,177		Venkatraman et al.	10-2000	
P		6,216,173		Jones et al.	04-10-2001	
P		5,600,373		Chui et al.	02-04-1997	
P		5,666,161		Kohivama et al.	09-09-1997	
P		5,790,178		Shibata et al.	08-04-1998	
P		5,818,537		Enokida et al.	10-06-1998	
P		5,821,987		Larson	10-13-1998	
P		5,924,013		Guido et al.	07-13-1999	
P		5,960,085		De La Huerga	09-28-1999	
P		5,920,476		Hennessey et al.	07-16-1999	
P		5,493,281		Owens	02-20-1996	
P		5,453,933		Wright et al.	09/1995	
P		6,078,968		Lo et al.	06/2000	
P		4,531,182		Hvatt	07-1985	
P		4,937,737		Schwane et al.	06-1990	

[illegible]

Philip I. Snodgrass

1/31/2005

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

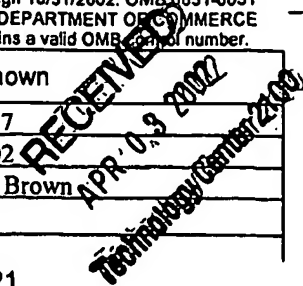
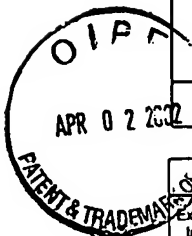
**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			Complete if Known	
	Application Number	10/039,147		
	Filing Date	01/04/2002		
	First Named Inventor	David W. Brown		
	Group Art Unit	2152		
	Examiner Name			
Sheet <b>3</b>	of <b>10</b>	Attorney Docket Number	P214021	



U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>3</sup>			
<i>TS</i>		5,095,445		Sekiguchi	03-1992	
<i>TS</i>		5,126,932		Wolfson et al.	06-1992	
<i>TS</i>		5,175,817		Adams et al.	12-1992	
<i>TS</i>		5,245,703		Hubert	09-1993	
<i>TS</i>		5,247,650		Judd et al.	09-1993	
<i>TS</i>		5,390,330		Talati	02-1995	
<i>TS</i>		5,491,813		Bondy et al.	02-1996	
<i>TS</i>		5,604,843		Shaw et al.	02-1997	
<i>TS</i>		5,608,894		Kawakami et al.	03-1997	
<i>TS</i>		5,168,441		Onarheim et al.	12-1992	
<i>TS</i>		5,392,207		Wilson et al.	02-1995	
<i>TS</i>		5,412,757		Endo	05-1995	
<i>TS</i>		5,465,215		Strickland et al.	11-1995	
<i>TS</i>		5,907,704		Gudmundson et al.	05-1999	
<i>TS</i>		5,914,876		Hirai	06-1999	
<i>TS</i>		5,855,483		Collins et al.	01-05-1999	
<i>TS</i>		4,159,417		Rubincam	06-26-1979	
<i>TS</i>		4,767,334		Thorne et al.	08-30-1988	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	† <sup>4</sup>
		Office <sup>3</sup>	Number	Kind Code <sup>5</sup> (if known)				

Examiner Signature <i>Philip S. Scorsini</i>	Date Considered <i>1/31/2005</i>
--	----------------------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number ‡ See attached Kinds of U.S. Patent Documents § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document § Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 If possible ¶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)  
Approved for use through 10/31/2002. OMB 0851-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			Complete if Known		
			Application Number	10/039,147	
			Filing Date	01/04/2002	
			First Named Inventor	David W. Brown	
			Group Art Unit	2152	
			Examiner Name		
Sheet	4	of	10	Attorney Docket Number	P214021

### U. S. PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>3</sup>			
TS		4,855,725		Fernandez	08-08-1989	
TS		4,887,966		Gellerman	12-19-1989	
TS		5,120,065		Driscoll et al.	06-09-1992	
TS		5,402,518		Lowery	03-28-1995	
TS		5,450,079		Dunaway	09-12-1995	
TS		5,670,992		Yasuhara et al.	09-23-1997	
TS		6,101,425		Govindaraj et al.	08-08-2000	
TS		5,852,441		Nakaiima et al.	12-22-1998	
TS		5,822,207		Hazama et al.	10-13-1998	
TS		5,737,523		Callaghan et al.	04-07-1998	
TS		5,652,866		Aldred et al.	07-29-1997	
TS		4,418,381		Molusis et al.	11-29-1983	
TS		6,144,895		Govindaraj et al.	11-07-2000	
TS		5,764,155		Kertesz et al.	06-09-1998	
TS		5,617,528		Stechmann et al.	04-01-1997	
TS		5,828,575		Sakai	10-27-1998	

### FOREIGN PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Office <sup>3</sup>	Number	Kind Code <sup>4</sup> (if known)				

Examiner Signature	<i>Philip S. Scudiero</i>	Date Considered	1/31/2005
-----------------------	---------------------------	--------------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2152
		Examiner Name	
		Attorney Docket Number	P214021
Sheet	5	of	10

OTHER PRIOR ART AND NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
PS		WOSA Backgrounder: Delivering Enterprise Services to the Windows-based Desktop, July 1993, Microsoft Development Library; pp. 1-19	
PS		WOSA INSIDE WINDOWS 95; pp. 348-351	
PS		Software Products for Industrial Automation, ICONICS; 6 pages	
PS		WEB 3.0 Product Brochure, Trihedral Engineering Ltd. (1994); 6 pages	
PS		The Complete, Computer-Based Automation Tool (IGSS) Seven Technologies A/S; 6 pages	
PS		Oregon Micro Systems Product Guide: pp. 1-20	
PS		AIMAX-WIN Product Brochure, TA Engineering Co., Inc.; 8 pages	
PS		XANALOG Model NL-SIM Product Brochure, XANALOG, 4 pages	
PS		ExperTune PID Tuning Software, Gerry Engineering Software; 6 pages	
PS		PMAC Product Catalog, page 43	
PS		Paragon TNT Product Brochure, Intec Controls Corp.; 6 pages	

Examiner Signature		Date Considered	1/31/2005
--------------------	--	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0851-0031  
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;">(use as many sheets as necessary)</p>		Complete if Known	
		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2152
		Examiner Name	
		Attorney Docket Number	P214021

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
PS		Aerotech Motion Control Product Guide; pp. 233-234	
PS		OpenBatch Product Brief, PID, Inc.; 6 pages	
PS		PC/DSP-Series Motion Controller C Programming Guide; pp. 1-54	
PS		FIX Product Brochure, Intellution (1994); 6 pages	
PS		Precision Motion Controls Product Guide; page 17	
PS		Compumotor Digiplan (1993-94) Catalog pp. 10-11	

Examiner Signature <i>Philip J. Sander</i>	Date Considered <i>11/31/2005</i>
--	-----------------------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2152
		Examiner Name	
		Attorney Docket Number	P214021

RECEIVED  
APR 03 2002  
Technology Center 2100

OTHER PRIOR ART & NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	1*
PS		SUE CHEN, JONATHON LIN; "Computer Numerical Control: Essentials in Programming and Networking"; Part 5, Chapter 27; pp. 824-848	
PS		PRITSCHOW et al.; "Open System Controllers: Challenge for the Future of the Machine Tool Industry"; pub. 1/15/93; pp. 449-452	
PS		WILLIAM E. FORD; "What Is an Open Architecture Robot Controller" pub. 8/16/94; pp. 27-32	
PS		MARCOS et al.; "A New Solution for Integrating Control Devices Involved in Computer-Integrated Manufacturing"; pub. 9/2/96; pp. 485-490	
PS		CHU AND WANG; "Development of a Practical SFC System for CNC Machine Shop"; pub. 1994; pp. 362-367	
PS		MICROSOFT; "The Microsoft Object Technology Strategy"; pub. March 1994; pp. 1-33	
PS		MICROSOFT; "Open Systems: Technology, Leadership, and Collaboration"; pub. March 1994; pp. 1-15	
PS		MICROSOFT; Microsoft OLE Today and Tomorrow: Technology Overview"; pub. December 1993; pp. 1-9	
PS		MICROSOFT; "Object Linking and Embedding 2.0 Backgrounder"; pub. September 1993; pp. 1-15	
PS		ROBERT ANDERSON; "SMART: A Modular Architecture for Robotics and Teleoperation"; pub. 1993; pp. 416-421	
PS		PROCTOR et al.; "Validation of Standard Interfaces from a Machine Control"; pub. 1996; pp. 659-664	

Examiner Signature	<i>Philip J. London</i>	Date Considered	1/31/2005
--------------------	-------------------------	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2152
		Examiner Name	Technology Center 2100
Sheet 8	of 10	APR 02 2002	Attorney Docket Number P214021

OTHER PRIOR ART, NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	†
PS		ALTINTAS et al.; "Design and Analysis of a Modular CNC System"; pub. 3/4/90; pp. 305-316	
PS		WRIGHT et al.; "Open Architecture Manufacturing: The Impact of Open-System Computers on Self-sustaining Machinery and the Machine Tool Industry"; pp. 41-47	
PS		PROTOCTOR et al.; "Open Architecture Controllers"; pub. June 1997; pp. 60-64	
PS		LUTZ et al.; "OSACA-The Vendor-Neutral Control Architecture"; pub. December 1997; pp. 247-256	
PS		MORALES et al.; "A Generalised Software Control System for Industrial Robots"; pub. 1998; pp. 411-416	
PS		FENG et al.; "Distributed Control of a Multiple-Tethered Mobile Robot System for Highway Maintenance and Construction"; pub November 1997; pp. 383-392	
PS		FEDROWITZ; "IRL-Based Expansion of the Commonly Used High-Level Language C for Robot Programming;" pub. Oct. 1995; 5 pages	
PS		SZABO et al.; "Validation Results of Specifications for Motion Control Interoperability"; pub. 1997; pp. 166-167	
PS		CHANG et al.; "Development and Implementation of an Application Programming Interface for PC/DSP-based Motion Control System"; pub. 1998; pp. 94-105	
PS		EROL et al.; "Open System Architecture Modular Tool Kit for Motion and Machine Control"; pub. September 2000; pp. 281-291	
PS		MIZUKAWA et al.; "OriN: Open Robot Interface for the Network: A Proposed Standard"; pub. May 2000; pp. 344-350	

Examiner Signature	<i>Philip L. Schuler</i>	Date Considered	1/31/2005
--------------------	--------------------------	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box → +

PTO/SB/088 (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2152
		Examiner Name	
		Attorney Docket Number	P214021

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	1*
PS		MICHALOSKI et al.; "A Framework for Component-base CNC Machines" pub. November 1998; pp. 132-143	
PS		BOUZOUIA et al.; "A Three-layer Workcell Control Architecture Design"; pub. May 1998; pp. 1185-1191	
PS		MORALES et al.; "GENERIS: The EC-JRC Generalized Software Control System for Industrial Robots"; pub. 1999; pp. 26-33	
PS		MUIR et al.; "Mechatronic Objects for Real-time Control Software Development"; pub. November 1998; pp. 251-265	
PS		CHO et al.; "A Compact/Open Network-based Controller Incorporating Modular Software Architecture for a Humanoid Robot"; pub. 1999; pp. 341-355	
PS		GE et al.; "A One-stop Solution in Robotic Control System Design"; pub. September 2000; pp. 42-55	
PS		MCGRAW et al.; "A Friendly Command, Control, and Information System for Astronomy"; pub. 1996; pp. 356-367	
PS		JACKMAN; "Robotic Control Using Sequential Function Charts"; pub. 1996; pp. 120-128	
PS		MIZUKAWA et al.; "De-facto Standard API for Open and Networked Industrial Robots"; pub. October 1999; pp. 455-462	
PS		LEU et al.; "A Telemanufacturing Workcell over the Internet"; pub. November 1998; pp. 230-237	
PS		NATALE et al.; "Robust Hybrid Force/Position Control with Experiments on an Industrial Robot"; pub. September 19, 1999; pp. 956-961	

Examiner Signature		Date Considered	1/31/2005
--------------------	--	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number 2 Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
		Application Number		10/039,147	
		Filing Date		01/04/2002	
		First Named Inventor		David W. Brown	
		Group Art Unit		2152	
		Examiner Name			
		Attorney Docket Number		P21407	
Sheet	10	of	10	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <b>RECEIVED</b>            APR 03 2002            Technology Center 2100         </div>	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
PS		NILSSON et al.; "Integrated Architecture for Industrial Robot Programming and Control"; pub. Dec. 31, 1999; pp. 205-226	
PS		VALERA et al.; "Interactive Online Evaluation of Robot Motion Control"; pub. August 22, 1999; pp. 1039-1043	et
PS		"NEMI Low-cost Controller Project"; pub. December 1996; total pages 392	
PS		SPERLING; "Designing Applications for an OSACA Control"; pub. November 16, 1997; 5 pages	
PS		LUTZ et al.; "OSACA: The Vendor-neutral Control Architecture"; pub. 1997; 10 pages	
PS		SPERLING et al.; "Enabling Open Control Systems: An Introduction to the OSACA System Platform"; pub. May 1996; pp. 1-8	
PS		"Requirements of Open Modular Architecture Controllers for Applications in the Automotive Industry"; pub. 12/13/94; pp. 1-13	
PS		Open, Modular Architecture Controls at GM Powertrain"; pub. May 14, 1996; pp. 1-33	
PS		PROCTOR et al.; "Validation of Standard Interfaces for Machine Control"; pub. Dec. 6, 2000; pp. 1-7	
PS		"Technologies Enabling Agile Manufacturing (TEAM) Intelligent Closed Loop Processing"; pub. January 11, 1996; 30 pages	

Examiner Signature	<i>Philip A. Sander</i>	Date Considered	1/31/2005
--------------------	-------------------------	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Approved for use through 10/31/2002, OMB 0651-0031

Substitute for form 14498/FTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/039,147
--------------------	------------

Filing Date	01/04/2002
-------------	------------

First Named Inventor	David W. Brown
----------------------	----------------

Group Art Unit	2153
----------------	------

Examiner Name	G. Burgess
---------------	------------

Attorney Docket Number P214021

Sheet 1 of 3

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant - Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup>			
PS		6,292,174		Mallett et al.	09/18/2001	
PS		6,028,593		Rosenberg et al.	02/22/2000	
PS		5,821,920		Rosenberg et al.	10/13/1998	
PS		6,147,647		Tassoudji et al.	11/14/2000	
PS		5,956,484		Rosenberg et al.	09/21/1999	RECEIVED
PS		6,101,530		Rosenberg et al.	08/08/2000	
PS		6,161,126		Wies et al.	12/12/2000	MAR 31 2004
PS		6,125,385		Wies et al.	09/26/2000	
PS		6,061,004		Rosenberg	05/09/2000	Technology Center 2100
PS		6,046,727		Rosenberg et al.	04/04/2000	
PS		6,219,032		Rosenberg et al.	04/17/2001	
PS		6,078,308		Rosenberg et al.	06/20/2000	
PS		6,317,116		Rosenberg et al.	11/13/2001	
PS		6,246,390		Rosenberg	06/12/2001	
PS		6,100,874		Schena et al.	08/08/2000	
PS		6,166,723		Schena et al.	12/26/2000	
PS		6,128,006		Rosenberg et al.	10/03/2000	
PS		6,243,078		Rosenberg	06/05/2001	
PS		6,191,774		Schena et al.	02/20/2001	
PS		6,131,097		Peurach et al.	10/10/2000	

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	<i>Philip S. Scoschi</i>	Date Considered	11/31/2005
-----------------------	--------------------------	--------------------	------------

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

no persons are required to  
MAR 29 2004  
CLOSURE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			Complete if Known		
			Application Number	10/039,147	
			Filing Date	01/04/2002	
			First Named Inventor	David W. Brown	
			Group Art Unit	2153	
			Examiner Name	G. Burgess	
Sheet	2	of	3	Attorney Docket Number	P214021

U. S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup>			
PS		6,285,351		Chang et al.	09/04/2001	
PS		6,300,936		Braun et al.	10/09/2001	
PS		6,304,091		Shahoian et al.	10/16/2001	
PS		6,288,705		Rosenberg et al.	09/11/2001	
PS		5,438,529		Rosenberg et al.	08/01/1995	
PS		5,623,582		Rosenberg	04/22/1997	
PS		5,576,727		Rosenberg et al.	11/19/1996	
PS		5,691,898		Rosenberg et al.	11/25/1997	
PS		6,057,828		Rosenberg et al.	05/02/2000	
PS		6,271,833		Rosenberg et al.	08/07/2001	
PS		5,889,672		Schuler et al.	03/30/1999	
PS		6,195,592		Schuler et al.	02/27/2001	
PS		6,169,540		Rosenberg et al.	01/02/2001	
PS		5,701,140		Rosenberg et al.	12/23/1997	
PS		5,739,811		Rosenberg et al.	04/14/1998	
PS		5,734,373		Rosenberg et al.	03/31/1998	
PS		6,104,158		Jacobus et al.	08/15/2000	
PS		6,219,033		Rosenberg et al.	04/17/2001	
PS		6,300,937		Rosenberg	10/09/2001	
PS		6,232,891		Rosenberg	05/15/2001	

[illegible]

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231 . **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

995, no persons are required

MAR 29 2004

DISCLOSURE

Y APPLICANT

s as necessary

RECEIVED  
MAR 31 2004  
Technology Center 2100

Examiner Signature	<i>W. L. L. L. L.</i>	Date Considered	1/31/2005
-----------------------	-----------------------	--------------------	-----------

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box →

PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Complete if Known	
		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2153
		Examiner Name	G. Burgess
		Attorney Docket Number	P214021
Sheet	1	of	3

RECEIVED

MAR 31 2004

Technology Center 2100

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T*
PS	1	BRADLEY BARGEN and PETER DONNELLY; <u>Inside Direct X – In Depth Techniques for Developing High-Performance Multimedia Applications</u> ; 1988; Chps. 1, 18-20, 22-27; Microsoft Press; U.S.	
PS	2	PETER KOVACH; <u>Inside Direct3D – The Definitive Guide for Real-Time 3D Power and Performance for Microsoft Windows</u> ; 2000; Chps. 1, 7, 15; Microsoft Press; U.S.	
PS	3	M. FARSI and M. BARBOSA; <u>CANopen Implementation - Applications to Industrial Networks</u> ; 2000; Research Studies Press Ltd.; England and U.S.	
PS	4	WOLFHARD LAWRENZ; <u>CAN System Engineering – From Theory to Practical Applications</u> ; 1997; Springer-Verlag New York, Inc.; U.S.	
PS	5	ALLEN-BRADLEY; "CNCnet Software Library"; October, 1992; Publication 8000-6.1.1; U.S.	
PS	6	ROBERT BOSCH GmbH; "CAN Specification"; September, 1991; Version 2.0.	
PS	7	SISCO, INC.; "Overview and Introduction to the Manufacturing Message Specification (MMS)"; 1994-1995; Revision 2; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
PS	8	ISO-9506-1 "Industrial Automation Systems—Manufacturing Message Specification—Part 1: Service definition"; August, 2000; pp. i-22; ISO/IEC; Switzerland.	
PS	9	ISO-9506-2 "Industrial Automation Systems—Manufacturing Message Specification—Part 2: Protocol specification"; August 2000; pp. i-6; ISO/IEC; Switzerland.	
PS	10	SISCO, INC.; "MMS-EASE"; January 1996; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
PS	11	ANSI/EIA-484-A "Electrical and Mechanical Interface Characteristics and Line Control Protocol Using Communication Control Characters for Serial Data Link Between a Direct Numerical Control System and Numerical Control Equipment Employing Asynchronous Full Duplex Transmission"; June, 1995; Electronic Industries Association; U.S.	

Examiner Signature	<i>Whitney L. Schuster</i>	Date Considered	1/31/2005
--------------------	----------------------------	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number: Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2153
		Examiner Name	G. Burgess
Sheet 2 of 3	Attorney Docket Number	P214021	

RECEIVED

MAR 31 2004

Technology Center 2100

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	†
RL	12	ISO/IEC 7498-1 "Information Technology—Open Systems Interconnection-Basic Reference Model: The Basic Model"; November 1994; U.S.	
RL	13	ISO/IEC 7498-3 "Information Technology—Open Systems Interconnection-Basic Reference Model: Naming and Addressing"; April 1997; U.S.	
RL	14	TODD J. SCHUETT; "The Benefits and Data Bottlenecks of High Speed Milling"; August, 1995; conference paper presented at Southeastern Michigan Chapter American Mold Builders Association; Creative Technology Corporation; U.S.	
RL	15	TODD J. SCHUETT; "The Ultimate DNC; Direct CNC Networking (DCN)"; <u>Modern Machine Shop</u> ; January, 1996; Creative Technology Corporation; U.S.	
RL	16	TODD J. SCHUETT; "Advanced Controls for High Speed Milling"; conference paper presented at the SME "High Speed Machining" conference; May 7-8, 1996; Creative Technology Corporation; U.S.	
RL	17	LEITAO, MACHADO & LOPES; "A Manufacturing Cell Integration Solution"; paper developed at CCP as a part of the ESPRIT 5629 Project; October, 1995.	
RL	18	MITSUBISHI ELECTRIC; <u>Mitsubishi Electric Advance: Programmable Logic Controllers Edition</u> ; September, 1996; Vol. 76; Mitsubishi Electric Corporation; Tokyo.	
RL	19	FARSI, M.; "Flexible and Reliable Robotics Cells in Factory Automation"; 1993; pp. 520-525.	
RL	20	CHU & WANG; "Development of a Practical SFC System for CNC Machine Shop"; <u>International Conference on Data and Knowledge Systems for Manufacturing and Engineering</u> ; May 1994; pp. 362-367, Vol. 1; pp. xx+745, Vol. 2; Chinese Univ.; Hong Kong.	
RL	21	FARSI, M.; "Device Communication for Flexible Manufacturing:-A New Concept"; 1994; pp. 328-334.	
RL	22	FARSI, M.; "A Production Cell Communication Model in Factory Automation Using the Controller Area Network"; 1995; pp. 90-95.	

Examiner Signature	<i>Philip L. Scarb</i>	Date Considered	1/31/2005
--------------------	------------------------	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;"><i>(use as many sheets as necessary)</i></p>		Complete if Known	
		Application Number	10/039,147
		Filing Date	01/04/2002
		First Named Inventor	David W. Brown
		Group Art Unit	2153
		Examiner Name	G. Burgess
		Attorney Docket Number	P214021
Sheet	3	of	3

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
RS	- 23	FARSI, M. "CANopen: The Open Communications Solution"; 1996; pp. 112-116.	
RS	- 24	KATAYAMA et al.; "A Motion Control System with Event-driven Motion-module Switching Mechanism for Robotic Manipulators"; <u>IEEE International Workshop on Robot and Human Communication</u> ; July, 1993; pp. 320-325; U.S.	
RS	- 25	MATSUI et al.; "An Event-Driven Architecture for Controlling Behaviors of the Office Conversant Mobile Robot, <i>Jijo-2</i> "; <u>Proceedings of the 1997 IEEE International Conference on Robotics and Automation</u> ; April 1997; pp. 3367-3372; U.S.	
RS	- 26	MICROSOFT CORPORATION; "How to Write and Use ActiveX Controls for Microsoft Windows CE 3.0"; <u>Windows CE 3.0 Technical Articles</u> ; June, 2000; pp. 1-5.	
RS	- 27	MICROSOFT CORPORATION; "Notes on Implementing an OLE Control Container"; <u>ActiveX Controls Technical Articles</u> ; September 21, 1994; pp. 1-47.	
RS	- 28	MICROSOFT CORPORATION; "What OLE Is Really About"; <u>OLE (General) Technical Articles</u> ; July, 1996; pp. 1-33.	
RS	- 29	MICROSOFT CORPORATION; "Categorizing by Component Capabilities"; <u>Platform SDK: COM</u> ; November, 2001; pp. 1-23.	
		<b>RECEIVED</b>	
		MAR 31 2004	
		Technology Center 2100	

Examiner Signature		Date Considered	1/31/2005
--------------------	--	-----------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



+

Approved for use through 10/31/2002. OMB 0851-0031

[illegible]**Complete if Known**

(use as many sheets as necessary)

Sheet | 1

of 2

Application Number	10/039,147
Filing Date	01/04/2002
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	
Attorney Docket Number	P214021

U. S. PATENT						
Examiner Initials*	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup>			
JS		4,769,771		Lipmann et al.	09-1988	
JS		6,546,436		Fainmesser et al.	04-2003	
JS		5,724,074		Chainani et al.	03-1998	
JS		6,497,606		Fong et al.	12-2002	
JS		6,290,565		Gaylean III et al.	09-2001	
JS		6,012,961		Sharpe et al.	01-2001	
JS		6,309,275		Fong et al.	10-2001	
JS		4,923,428		Curran, Kenneth J.	05-1990	
JS		6,083,104		Choi, Kei Fung	07-2000	
JS		5,390,304		Leach et al.	02-1995	
JS		4,987,537		Kawata, Kazuhide	01-1991	
JS		6,678,713		Mason et al.	01-2004	
JS		6,442,451		Lapham, John R.	08-2002	
JS		6,301,634		Gomi et al.	10-2001	
JS		6,031,973		Gomi et al.	02-2000	
JS		5,805,785		Dias et al.	09-1998	
JS		5,754,855		Miller et al.	05-1998	
JS		5,625,821		Record et al.	04-1997	
JS		4,800,521		Carter et al.	01-1989	
JS		6,400,996		Hoffberg et al.	06-2002	

[illegible]

Philip S. Seaborn

1/31/2005

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 If possible 6 Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

(use as many sheets as necessary)

Sheet | 2

of 2

Application Number	10/039,147
--------------------	------------

Filing Date	01/04/2002
-------------	------------

First Named Inventor	David W. Brown
----------------------	----------------

Group Art Unit	2153
----------------	------

**Examiner Name**

Attorney Docket Number	P214021
------------------------	---------

[illegible]

## FOREIGN PATENT

[illegible]

**Examiner  
Signature**

Philip S. Scofield

**Date**  
**Considered**

1/31/2005

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

+

**Complete if Known**

Application Number	10/039,147
Filing Date	01/04/2002
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	

*(use as many sheets as necessary)*

Sheet	1	of	1
-------	---	----	---

Attorney Docket Number	P214021
------------------------	---------

[illegible]

**Examiner  
Signature**

Date  
Considered

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**